

I CLAIM:

1. Apparatus for installing a repair clamp on a pipe, said repair clamp including a generally cylindrical body having first and second opposed edge flanges, a slot extending the length thereof for receiving the pipe and positioning said repair clamp about an outer circumference of the pipe, and plural nut and bolt combinations coupled to said edge flanges for drawing the repair clamp tightly about the pipe, said apparatus comprising:

a body portion having first and second opposed ends;

an arm having a first end pivotally coupled to said body portion intermediate the first and second opposed ends thereof, said arm further including a second opposed end adapted for insertion in an aperture in the first edge flange of the repair clamp;

a clasp pivotally coupled to said body portion adjacent the first end thereof and adapted to engage an outer edge of the repair clamp's second edge flange when said body portion is in a first position relative to said arm and clasp and the repair clamp is loosely disposed about the pipe, wherein pivoting displacement of said body portion about said arm and clasp to a second position draws the repair clamp's edge flanges together for securely maintaining the repair clamp on and in engagement with the pipe and allowing the nut and bolt combinations to be tightened for securing the repair clamp to the pipe in a sealed manner; and

an adjustable mechanism for adjusting spacing between said arm and said clasp to accommodate a range of sizes of the repair clamp and diameters of the pipe.

2. The apparatus of claim 1 wherein said clasp includes a first end engaging the outer edge of the repair clamp's second edge flange and a second opposed end pivotally coupled to said body portion.

3. The apparatus of claim 2 wherein the first end of said clasp includes a recessed slot adapted to receive the outer edge of the repair clamp's second edge flange.

4. The apparatus of claim 3 further comprising a first pivot pin coupling the second end of said clasp to said body portion.

5. The apparatus of claim 1 further comprising a second pivot pin coupling the first end of said arm to said body portion.

6. The apparatus of claim 5 wherein said adjustable mechanism includes at least one elongated slot disposed in said body portion and adapted to receive said second pin and having plural engaging ribs disposed in a spaced manner along the length of said slot for engaging said second pivot pin for permitting spacing between the recessed slot of said clasp and the second
5 end of said arm to be adjusted to accommodate a range of sizes of the repair clamp and diameters of the pipe.

7. The apparatus of claim 6 wherein said body portion includes a pair of elongated slots each having plural engaging members disposed in a spaced manner along the length of each of said slots for engaging said second pivot pin for permitting spacing between the recessed slot of said clasp and the second end of said arm to be adjusted.

8. The apparatus of claim 7 wherein said body further includes first and second parallel, spaced, linear members each including a respective elongated slot having plural engaging members, and wherein said first pivot pin is disposed in the slots in said first and second members.

9. The apparatus of claim 8 wherein each of said engaging ribs includes a curved portion for engaging and maintaining said second pivot pin in fixed position in said slots in a

releasable manner.

10. The apparatus of claim 9 wherein each of said elongated slots includes plural curved ribs arranged in spaced, linear alignment within the slot.

11. The apparatus of claim 4 wherein said clasp includes a hook disposed on the second end thereof and positioned about said first pivot pin.

12. The apparatus of claim 11 wherein the first and second spaced members of said body portion form a handle at respective first connected ends thereof.

13. The apparatus of claim 12 wherein second opposed ends of said first and second members are arranged in a spaced manner from each other and wherein said arm and said clasp are disposed between said first and second members adjacent the second ends thereof.

14. The apparatus of claim 13 wherein said first and second pivot pins are disposed between and coupled to said first and second members.

15. The apparatus of claim 14 wherein said adjustable mechanism further includes first and second elongated linear slots respectively disposed in said first and second members with each of said slots having plural engaging members disposed in a spaced manner along the respective lengths thereof, and wherein the engaging members in said first slot engage a first end
5 of said second pivot pin and the engaging members in said second slot engage a second opposed end of said second pivot pin.

16. The apparatus of claim 1 wherein said arm and said clasp are disposed in closely spaced, aligned relation when said body portion is pivotally displaced to said second position.

17. The apparatus of claim 1 further comprising a handle disposed on the second end of said body portion.

18. The apparatus of claim 17 wherein said handle is comprised of rubber or an elastomeric material.

19. The apparatus of claim 1 wherein the second end of said arm includes a hook structure for insertion into the aperture when said body portion is in said first position, and wherein said hook structure cannot be removed from the aperture when said body portion is in said second position for locking the repair clamp in position on the pipe.

20. The apparatus of claim 19 wherein said aperture is in the form of a generally linear slot and said hook structure includes first and second coupled flat portions having approximately 90° relative orientation.

21. The apparatus of claim 1 wherein said clasp is generally C-shaped and includes an elongated slot for engaging an outer edge of the repair clamp's second edge flange.

22. The apparatus of claim 1 wherein said apparatus is comprised of high strength steel.

23. The apparatus of claim 1 further comprising first and second pins attached to said body portion for pivotally coupling said arm and clasp, respectively, to said body portion, and wherein said second pin forms an axis of rotation about which said body portion rotates when moved between said first and second positions.

24. The apparatus of claim 23 wherein said first and second pins and an end portion of said clasp engaging an outer edge of the repair clamp's second edge flange are in general linear alignment when said body portion is in said second position.

25. The apparatus of claim 24 wherein the body portion is pivotally displaced about said second pin in moving said body portion from said first to said second position in removing

said apparatus from the repair clamp.

26. Apparatus for installing a repair clamp on a pipe, said repair clamp including a generally cylindrical body having first and second opposed edge flanges, a slot extending the length thereof for receiving the pipe and positioning said repair clamp about an outer circumference of the pipe, and plural nut and bolt combinations coupled to said edge flanges for drawing the repair clamp tightly about the pipe, said apparatus comprising:

a body portion having first and second opposed ends;

an arm having a first end pivotally coupled to said body portion intermediate the first and second opposed ends thereof, said arm further including a second opposed end adapted for insertion in an aperture in the first edge flange of the repair clamp;

a clasp pivotally coupled to said body portion adjacent the first end thereof and adapted to engage an outer edge of the repair clamp's second edge flange when said body portion is in a first position relative to said arm and clasp and the repair clamp is loosely disposed about the pipe, wherein pivoting displacement of said body portion about said arm and clasp to a second position draws the repair clamp's edge flanges together for securely maintaining the repair clamp on and in engagement with the pipe and allowing the nut and bolt combinations to be tightened for securing the repair clamp to the pipe in a sealed manner; and

a moveable member connecting said arm to said body portion, wherein the position of said arm relative to said clasp may be adjusted for engaging repair clamps having a range of sizes for positioning on pipes having a range of diameters.